

CLAIMS:

1. A recording apparatus for recording digital information signals on a removable rewritable disc like recording medium, the medium comprising a user area comprising user data represented by the digital information signals and a table area outside the user area comprising a defect table, the defect table comprising defect management data having a predefined data format, the defect management data related to defect areas in the user area and replacement areas on the medium, the recording apparatus comprising
- 5 input means for receiving the digital information signals;
recording means for recording the digital information signals on the medium;
reading means for reading recorded digital information signals recorded on the
- 10 medium;
output means for outputting the read digital information signals;
control means for controlling recording the digital information signals,
characterized in that
- 15 the control means are adapted to read the defect table from the medium, to
modify the defect management data comprised in the defect table read in order to block write
access to the user area according to predefined defect management rules and to
record the defect table comprising modified defect management data on the
medium.
- 20 2. A recording apparatus as claimed in claim 1, the defect management data
comprising a list of addresses of the replacement areas, characterized in that
- the control means are adapted to search the list of addresses of the replacement
areas comprised in the defect table read for free replacement area addresses of all free
replacement areas without the user data and to
- 25 modify the defect management data by marking the all free replacement areas
as unusable.

3. A recording apparatus as claimed in claim 1, characterized in that the control means are adapted to replace a part of the defect management data by data having a format different from the predefined data format.
- 5 4. A recording apparatus as claimed in claim 1, the medium comprising a primary defect table, the defect table being a copy of the primary defect table, characterized in that the control means are adapted to modify the defect management data comprised in the defect table read with respect to primary defect management data comprised in the primary defect table, so the defect management data comprised in the defect table are inconsistent
10 with the primary defect management data.
5. A recording apparatus as claimed in claim 4, the primary defect management data comprising primary update counter data related to updates of the primary defect table, characterized in that the control means are adapted to modify a copy of the primary update
15 counter data comprised in the defect management data with respect to the primary update counter data.
6. A recording apparatus as claimed in claim 1, characterized in that the control means are adapted to generate protection data comprising information related to modification
20 of the defect management data and to record the protection data on the medium.
7. A recording apparatus as claimed in claim 6, characterized in that
the control means are adapted to read the protection data and the defect table comprising the modified defect management data from the medium, to
25 restore the defect management data from the modified defect management data using the protection data in order to resume write access to the user area according to the predefined defect management rules and to
record the defect table comprising the defect management data on the medium.
- 30 8. A method of protecting digital information signals recorded on a removable rewritable disc like recording medium, the medium comprising a user area comprising user data represented by the digital information signals and a table area outside the user area comprising a defect table, the defect table comprising defect management data having a

predefined data format, the defect management data related to defect areas in the user area and replacement areas on the medium, the method characterized by

reading the defect table from the medium;

modifying the defect management data comprised in the defect table read in

5 order to block write access to the user area according to predefined defect management rules;
recording the defect table comprising modified defect management data on the medium.

9. A method as claimed in claim 8, the defect management data comprising a list
10 of addresses of the replacement areas, characterized by

searching the list of address of the replacement areas comprised in the defect table read for free replacement area addresses of all free replacement areas without the user data and

15 modifying the defect management data by marking the all free replacement areas as unusable.

10. A method as claimed in claim 8, characterized by replacing a part of the defect management data by data having a format different from the predefined data format.

20 11. A method as claimed in claim 8, the medium comprising a primary defect table, the defect table being a copy of the primary defect table, characterized by modifying the defect management data comprised in the defect table read with respect to primary defect management data comprised in the primary defect table, so the defect management data comprised in the defect table are inconsistent with the primary defect management data.

25 12. A method as claimed in claim 11, the primary defect management data comprising primary update counter data related to updates of the primary defect table, characterized by modifying a copy of the primary update counter data comprised in the defect management data with respect to the primary update counter data.

30 13. A method as claimed in claim 8, characterized by
generating protection data comprising information related to modification of the defect management data;
recording the protection data on the medium.

14. A method as claimed in claim 13, characterized by
reading the protection data and the defect table comprising the modified defect
management data from the medium;
- 5 restoring the defect management data from the modified defect management
data using the protection data in order to resume write access to the user area according to the
predefined defect management rules;
recording the defect table comprising the defect management data on the
medium.
- 10 15. A computer data system comprising a computer connected to a recording
apparatus for recording digital information signals on a removable rewritable disc like
recording medium, the medium comprising a user area comprising user data represented by
the digital information signals and a table area outside the user area comprising a defect table,
15 the defect table comprising defect management data having a predefined data format, the
defect management data related to defect areas in the user area and replacement areas on the
medium, the recording apparatus comprising
input means connected to the computer for receiving the digital information
signals;
- 20 recording means for recording the digital information signals on the medium;
reading means for reading recorded digital information signals recorded on the
medium;
output means for outputting the read digital information signals to the
computer;
- 25 control means for controlling recording the digital information signals,
characterized in that the computer is adapted to control the control means of the recording
apparatus to perform the method according to any of claims 8 – 14.
- 30 16. A computer program product for protecting digital information signals
recorded on a removable rewritable disc like recording medium, which program is operative
to cause a processor to perform the method according to any of claims 8 – 14.